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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,247	11/26/2001	Faramarz Sabouri	5543	8289

7590 06/04/2003
Samuels, Gauthier & Stevens LLP
Suite 3300
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Boston, MA 02110

EXAMINER

NGUYEN, PATRICIA T

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,247

Applicant(s)

SABOURI ET AL.

Examiner

Patricia T. Nguyen

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 is/are allowed.
- 6) ☒ Claim(s) 1-14, 16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 17 is objected to because of the following informalities:

Claim 17, line 11, "said second transformer winding" should read -- said secondary transformer winding --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hofer, U.S Patent # 4,614,914.

Fig. 5 of Hofer discloses a circuit comprising: amplifiers 36, 66 can be read as a plurality of amplifiers; input port at voltage generator 18 can be read as a system input port; transformer windings 58, 60 can be read as a plurality of primary transformer windings; transformer winding 64 can be read as a single secondary transformer winding; output port at load Rws can be read as a system output port; load Rws can be read as a load.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofer, U.S. Patent # 4,614,914 in view of Stuckert, U.S. Patent # 3,934,213.

Fig. 5 of Hofer discloses a circuit comprising: amplifiers 36, 66 can be read as a plurality of amplifiers or at least one amplifier or power amplifier circuitry; input port at voltage generator 18 can be read as a system input port; transformer windings 58, 60 can be read as a plurality of primary transformer windings wherein transformer winding 58 can be read as a first primary transformer winding, transformer winding 60 can be read as a second primary transformer winding; transformer winding 64 can be read as a single secondary transformer winding or a secondary transformer winding; output port at load Rws can be read as a system output port; load Rws can be read as a load.

Regarding claim 2, see spec., col. 5, lines 33-35. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to design the turns ratio from each primary transformer winding to the secondary transformer winding is $N:1$ in order to have an optimum working condition for the circuit and to meet system requirements since this is a matter of design choice.

Regarding claims 3, 11, although Hofer does not mention that the current provided by each amplifier is $i_1 = i_2 / (mN)$, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to design the current provided by each amplifier to be $i_1 = i_2 / (mN)$ in order to meet system requirements since this is a matter of design choice.

Regarding claim 4, see spec. col. 6, lines 54, 55.

Regarding claims 5 and 8, see Fig. 6 wherein windings 72, 78, 80 can be read as primary transformer windings.

Regarding claim 9, although Hofer does not have four primary transformer windings, the number of primary transformer windings is just a design variable. Thus, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to design the system to include four primary transformer windings in order to meet system requirements since this is a matter of design choice.

Regarding claims 18, 19, although Hofer does not mention about the amplifier are spatially distributed on the integrated circuit chip, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to design the amplifiers to be distributed on the integrated circuit chip to reduce circuit size and weight in order to meet system

requirements since integrated amplifier circuit is well known in the art and this is a matter of design choice.

Allowable Subject Matter

Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 17 is allowed.

The following is a statement of reasons for the indication of allowable subject matter: prior art does not teach nor render obvious a circuit that has, in combination with other limitations, power amplifier circuitry couples the first and second primary transformer windings and the secondary transformer winding such that the first and second positive directions are the same with respect to the secondary transformer winding; neither does it have the output of each of the amplifiers is a differential output.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia Nguyen whose telephone number is (703) 308-1927. The examiner can normally be reached on 6AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-1927. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-0142 for regular communications and (703) 305-0142 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1927.

PTN
May 29, 2003

PATRICIA NGUYEN
PRIMARY EXAMINER

Patricia Nguyen